

Isolation of *Janthinobacterium lividum* from early onset neonatal sepsis in Malaysia

ABSTRACT

Background: The term early onset neonatal septicaemia (EONS) refers to invasive bacterial infections that primarily involve the blood stream of neonates during the first 3 days of life. Although early onset neonatal septicaemia is relatively uncommon, it may be associated with case fatality rates of 15-30% and substantial morbidity in surviving infants. **Objectives:** This study describes an unusual septicaemia cases with *Janthino bacterium lividum* in neonatal Intensive Care Units. **Methods:** Bacterial causes of early onset neonatal sepsis in Kuala Lumpur Hospital Malaysia were investigated using broad range 16S rDNA PCR and sequencing. The bacterial DNA was isolated directly from blood without pre-incubation. All samples collected were equally cultured and incubated in automated BACTEC system. **Results:** Two hundred and fifty two neonates were recruited in this study with mean (SD) gestational age of 35.9. Neonates with *J. lividum* infection lacked microbiological evidence of septicaemia as their blood culture yielded no bacterial growth. However, the PCR analysis of these samples yielded 1100bp corresponding to bacteria species. **Conclusion:** This study demonstrates the value of PCR in detecting bacteria where special growth requirement is involved.

Keyword: *Janthinobacterium lividum*; Neonatal septicaemia; Neonatal intensive care units